



### Features

- ◇ For RF SAW filter
- ◇ Single-ended operation
- ◇ Ceramic Surface Mount Package
- ◇ Small size
- ◇ No matching required for operation at 50Ω
- ◇ RoHS compliant (2002/95/EC), Pb-free

### Specifications

Parameter	Unit	Minimum	Typical	Maximum
Center Frequency	MHz	-	402.5	-
Insertion Loss	dB	-	1.4	2.8
1 dB Bandwidth	MHz	2	6.6	-
Passband Variation	dB	-	0.5	1.3
Ultimate Rejection(@408.5MHz)	dB	15	40	-
Material Temperature coefficient	KHz/°C	-12.88		
Substrate Material	-	42LT		
Ambient Temperature	°C	25		
Operating Temperature Range	°C	-40	-	+85
Storage Temperature Range	°C	-45	-	+105
DC Voltage	V	0		
Input Power	dBm	-	-	10
ESD Class	-	1A		
Package Size	SMD3.8*3.8			

#### Notes:

1. All specifications are based on the test circuit shown;
2. In production, all specifications are measured by Agilent Network analyzer and full 2 port calibration at room temperature;
3. Electrical margin has been built into the design to account for the variations due to temperature drift and manufacturing tolerances;
4. This is the optimum impedance in order to achieve the performance show.

	<b>SIPAT Co., Ltd.</b> ( CETC No.26 Research Institute ) #14 Nanping Huayuan Road, Chongqing, China, 400060	Part Number	LBT40401	
		Rev. Date	2008-11-04	
		Ver.	1.0	Page 1/3

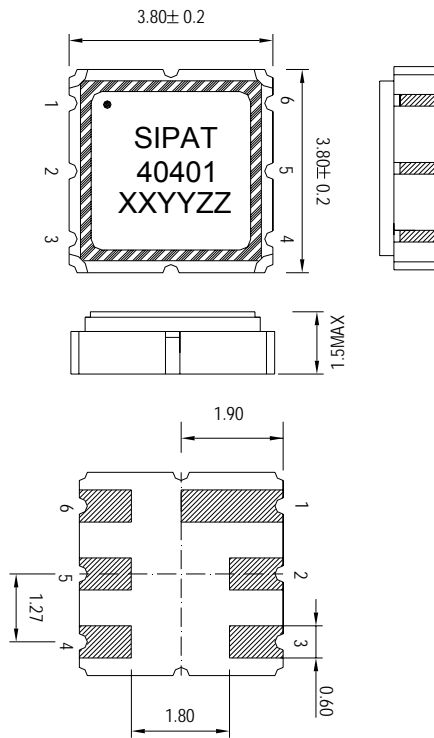
### Matching Configuration



Source/Load Impedance=50 ohm

Notes - Component values may change depending on board layout.

### Package Dimension



#### Pad Configuration:

Input: 2  
Output: 5  
Ground: All Others

#### Marking Configuration:

- 1) •: Pad Number 1 Index
- 2) SIPAT: Manufacturer Name
- 3) 40401: Part Number
- 4) XXYY: Date(Year/month)
- 5) ZZ: Identified Code

Package: SMD3.8\*3.8

Unit: mm

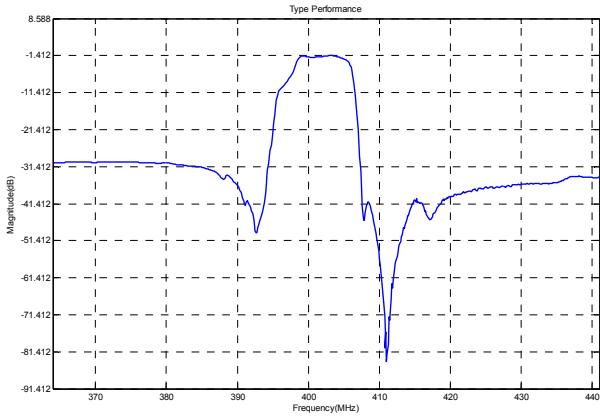


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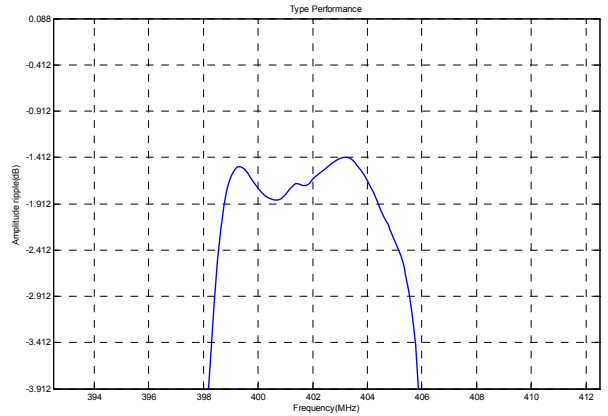
Typical Performance

Frequency Respond



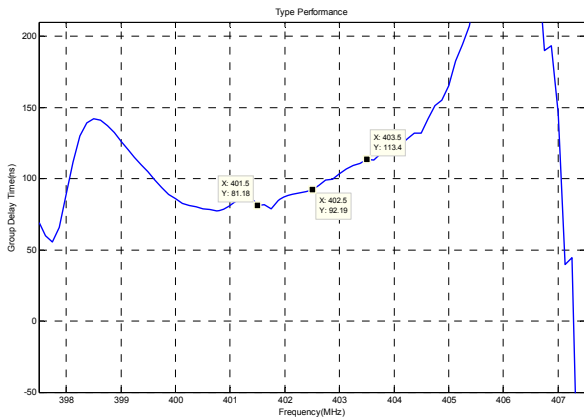
Horizontal: 10MHz/Div Vertical: 10dB/Div

Passband Respond



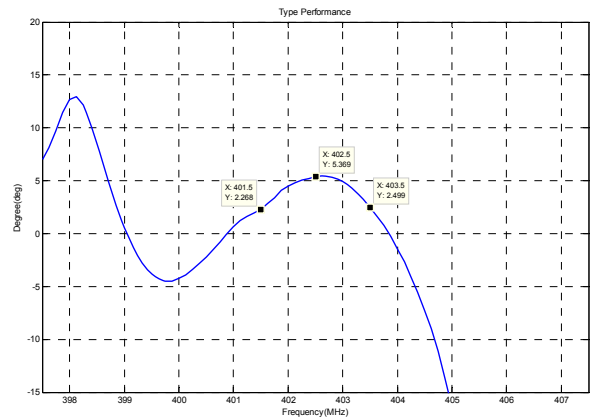
Horizontal: 2MHz/Div Vertical: 0.5dB/Div

Group Delay Variation( $f_0 \pm 1\text{MHz}$ )



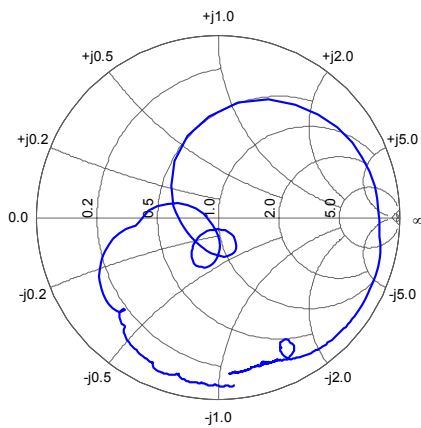
Horizontal: 1MHz/Div Vertical: 50ns/Div

Phase Linearity( $f_0 \pm 1\text{MHz}$ )

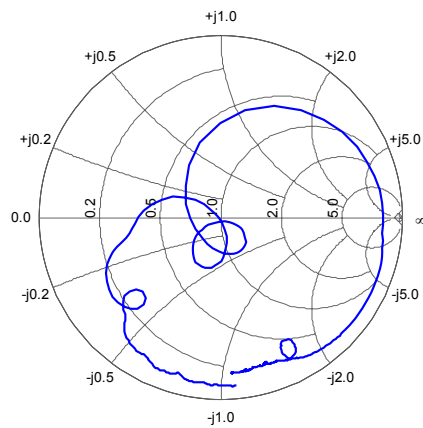


Horizontal: 1MHz/Div Vertical: 5deg/Div

Smith Chart S11



Smith Chart S22



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